

<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/762,257	PAN ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Brian M. Healy	2874	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the application filed 01/23/2004.
2. ☒ The allowed claim(s) is/are 1-6.
3. ☒ The drawings filed on 23 January 2004 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All   b) ☐ Some\*   c) ☐ None   of the:
  1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

<ol style="list-style-type: none"> <li>1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)</li> <li>2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____</li> <li>4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material</li> </ol>	<ol style="list-style-type: none"> <li>5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)</li> <li>6. <input type="checkbox"/> Interview Summary (PTO-413), Paper No./Mail Date _____</li> <li>7. <input type="checkbox"/> Examiner's Amendment/Comment</li> <li>8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance</li> <li>9. <input type="checkbox"/> Other _____</li> </ol>
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**Brian Healy**  
Primary Examiner

Brian M. Healy  
Primary Examiner  
Art Unit: 2874

## **DETAILED ACTION**

### ***Allowable Subject Matter***

The following is an examiner's statement of reasons for allowance: the closest prior art of record, i.e. Thorncraft et. al., U.S.P. No.5,015,058 teaches a method and apparatus for forming an asymmetrical optical fiber coupler using at least two optical fibers 25,26 of different cross section which are fused together at a coupling region 30 to form a fused directional coupler. Thorncraft et. al. (or the other cited references of record) fails to teach or suggest the claimed coupling method for forming an optical fiber coupler comprising: combining a pair of optical fibers with differing photosensitivity in parallel to form a fused portion and packaged in a substrate; irradiating the pair of optical fiber by intense ultraviolet light at the same time, adjusting the U.V radiation and laying the fused portion under focus of the UV radiation for a period of time for making for making the refractive index of the pair of optical fibers markedly different and asymmetric to decrease maximum coupling ratio; and supervising the floating state of a peak of light energy loss spectrum of the fused portion by an optical spectrum analyzer and turning off the UV radiation when the loss spectrum arrives at a maximum flat area. These limitations are recited in claims 1-6 and are considered to be patentable over the teachings of Thronecraft et. al. and all of the prior art of record..

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian M. Healy whose telephone number is (571)272-2347. The examiner can normally be reached on Compressed schedule Tues-Thurs from 7:00 to 4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney Bovernik can be reached on (703)308-4819. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Brian M. Healy  
Primary Examiner  
Art Unit 2874

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A handwritten signature in black ink, appearing to read "Brian Healy", is written over a horizontal line.

Brian Healy  
Primary Examiner